

ABSTRACT

A passive optical network system is disclosed that simultaneously provides both broadcasting service and data service. The passive optical network (PON) amplifies the optical signals for the broadcasting service in an optical amplifier media of the local office by pumping optical signals generated from the central office and provides the optical signals for the broadcasting service to the subscriber terminals. Therefore, the present invention can simultaneously provide broadcasting service and data service for more subscribers without reducing the number of subscribers to the PON. Also, the present invention uses a plurality of optical sources for the data service and the broadcasting service and receives the optical signals generated from the optical sources by using a plurality of optical receivers in the subscriber terminals, and thus can provide a greater amount and variety of data services and broadcasting services.